Title: Perfect score:

US-08-569-749-7 269

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Scoring table: Sequence:

BLOSUM62 Gapop 10.0

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protein search,

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January 7,

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No. is the number of results predicted by chance to have a squeater than or equal to the score of the result being printed, s derived by analysis of the total score distribution.
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SEQUENCE FROM N.A.

MEDIINE-96128127; PubMed-8548810;

Mether M. Pan M.-G., Henzel W.J., Ayres T.M., Goeddel D.V.;

"The TNNF2-TRAF signaling complex contains two novel proteins related to baculoviral inhibitor of apoptosis proteins.";

Cell 83:1243-1252(1995).
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013490; 016516;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
01-NOV-1997 (Rel. 35, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
PROTEIN 2) (HIAP REPEAT CONTAINING PROTEIN 3 (INHIBITOR OF APOPTOSIS PROTEIN 2) (HIAP2) (HIAP-2) (C-IAP1) (TNFR2-TRAF SIGNALING COMPLEX PROTEIN 2) (TAP HOMOLOG B).
BURGS OR APIZ OR IAP2 OR MIHB.
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MEDLINE-$6209843; PubMed-8643514;
Wren A.G., Pakusch M., Hawkins C.J.,
"Cloning and expression of apoptosis function to inhibit apoptosis and/or receptor-associated factors.";
                                                                                                                                                                                                                                                                                                                             MEDLINE-96149249; PubMed-8552191;
Liston P., Roy N., Tamai K., Lefebvre C., Baird Farahani R., McLean M., Ikeda J., Mackenzie A.,
"Suppression of apoptosis in mammalian cells by family of IAP genes.";
Nature 379;349-353(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Kammaila; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
[1]
                                                                                                                                               STRUCTURE BY NMR OF 266-363.
MEDLINE-99332054; Pubmed-10404221;
Hinds M.G., Norton R.S., Vaux D.L., [
"Solution structure of a baculoviral
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              Struct. Biol. 6:648-651(1999)

FORM THE BIR MOTIFS REGION INTERACTS ATTH THE RECEPTOR ASSOCIATED FACTORS 1 AND 2 (TRAF1 AND TRAF2) TO THE THE MECEDETOR ASSOCIATED FACTORS 1. THEN RECRUITED TO THE TUMO RECROSIS FACTOR RECEPTOR 2 (TNFR2).

SUBCELLULAR LOCATION: CYTOPLASMIC (POTENTIAL).

SUBCELLULAR LOCATION: CYTOPLASMIC (POTENTIAL).

SUBCELLULAR LOCATION: CYTOPLASMIC MAINY ESTAL AND ADULT TISSUES.

MAINLY EXPRESSED IN ADULT SKELETAL MUSCLE, THYMUS, TESTIS, OVARY AND PANCREAS, LOW OR ABSENT IN BRAIN AND PERIPHERAL BLOOD AND PANCREAS, LOW OR ABSENT IN BRAIN AND PERIPHERAL BLOOD
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BIR2_MOUSE BIR4_HUMAN BIR_CHICK BIR3_MOUSE PIAP_PIG BIR2_HUMAN

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Pfam; PF00651; CARD; 1.

Pfam; PF00097; Zf-C3H64; 1.

SMART; SM00114; CARD; 1.

SMART; SM00114; RING; 1.

SMART; SM00184; RING; 1.

SMART; SM00184; BIR, REPEAT_1; 3.

PROSITE; PS01282; BIR, REPEAT_2; 3.

PROSITE; PS50129; CARD; 1.
                                                                                                                                                                                                                                                                                          LAUGUSE STANDARD; PRT: 612 AA.
BIR3_MOUSE STANDARD; PRT: 612 AA.
06-22\text{10}; 008-864;
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
BACULOVIAL IAP REPEAR-CONTAINING PROTEIN 3 (INHIBITOR OF APOPTOSIS PROTEIN 2) (MIAP2) (MIAP2).
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     Rothe M., Pan M.~G., Henzel W.J., Ayres T.M., Goeddel D.V.;
"The TNER2-TRAF signaling complex contains two novel proteins related to baculoviral inhibitor of apoptosis proteins.";
Cell 83:1243-1252(1995).
                                                                                             SEQUENCE FROM N.A., AND PARTIAL S
MEDLINE-96128127; PubMed-8548810;
                                                                                                                                                                                                                                                                       PROTEIN 2) (MIAP2) (MI
BIRC3 OR API2 OR IAP2.
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EMBL; U45879; AAC50372.1; -.
EMBL; U37547; AAC50508.1; -.
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Mammalia; Eutheria; Rodentia;
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InterPro; IPR001315;
InterPro; IPR001841;
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hes 46; Conservative
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SIMILARITY: CONTAINS 3 BIR REPEATS.
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Pfam: pF00097; zf-C3HC4; 1.
SMART; SM00238; BIR: 3.
SMART; SM00114; CARD; 1.
SMART; SM00114; CARD; 1.
                                                                 PTAP_PIG STANDARD; PRT; 3
052640;
15-DEC-1998 (Rel. 37, Created)
15-DEC-1998 (Rel. 37, Last sequence up
20-AUG-2001 (Rel. 40, Last annotation
PUTATIVE INHIBITOR OF APOPTOSIS.
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WITH THE RECEPTOR ASSOCIATED FACTORS 1 AND 2 (TRAFI AND TRAFE) TO
FORM AN HETEROMERIC COMPLEX, WHICH IS THEN RECRUITED TO THE TUMOR
NECROSIS FACTOR RECEPTOR 2 (TNFR2).

1- SUBCELLULAR LOCATION: CYTOPLASHIC (POTENTIAL).

1- TISSUE SPECIFICITY: EXPRESSED IN HEART, BERIN, SPLEEN, LUNG,
LIVER, SKELETAL MUSCLE, KLDNEY, AND TESTIS.

1- SIMILARITY: BELONGS TO THE 1AP FAMILY.

1- SIMILARITY: CONTAINS 1 RING-TYPE ZINC FINGER.

1- SIMILARITY: CONTAINS 1 RING-TYPE ZINC FINGER.
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EMBL; U88909; AAC53532.1; -.
MGD; MGI:1197009; Birc3.
InterPro; IPR001370; BIR.
InterPro; IPR001315; CARD.
Sus scrofa
Eukaryota;
                                                     PIAP.
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Liston P., Lefebvre C., Fong W.G., Xuar
"Genomic Characterization of the mouse
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Genomics 46:495-503(1997).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    [2]
SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-Skeletal muscle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              interPro;
                                                                                                                                                                                                                                                                                                                    197 LARAGEYYIGPGDRVACFACGGKLSNWEPKDDAMSEHRRHFPHCPF 242
                                                                                                                                                                                                                                                                                                                                                                 1 LARAGEYYIGPGDRVACFACGGKLSNWEPKDDAMSEHRRHFPNCPF 46
                                                                                                                                                                                                                                             w
                                                                                                                                                                                                                                                                                                                                                                                                              ch 98.1%;
l Similarity 97.8%;
45; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1; RIN.
1282; BIR. A.
150143; BIR. REPE.,
2850209; CARO; 1.
46 113 BIR 1.
77 243 BIR 2.
329 BIR 3.
633 CARD,
633 RING-TYPE.
E -> K (IN P E08969D9'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IPR001841;
     (Pig).
Metazoa;
  Chordata; Craniata; Vertebrata; Euteleostomi;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            znf_ring.
                                                                                                                                                                                                                                                                                                                                                                                                            ; Score 264; DE
; Pred. No. 1e-2
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -> K (IN REF. 2).
E08969D93C6C610D
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Xuan
                                                                                                                            update)
                                                                                                                                                                                                358
                                                                                                update)
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Length 612;

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RESULTING A PROPERTY OF A PROP
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Best Local Similarity
Matches 43; Conser
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InterPro; IPR001315; CARD.
InterPro; IPR001841; Znf_ring.
InterPro; IPR001841; Znf_ring.
Pfam; PF000653; BIR; 2.
Pfam; PF000619; CARD; 1.
Pfam; PF00097; zf-C3HC4; 1.
SMART; SM00114; CARD; 1.
SMART; SM00114; CARD; 1.
SMART; SM00184; RING; 1.
SMART; SM00184; RING; 1.
                                                                                                                                                                                                                                                                     BIR2_HUMAN STANDARD; PRT; 604 AA.

Q13489; Q16628; Q9UP46;
Q1-NOV-1997 (Rel. 35, Created)
Q1-NOV-1997 (Rel. 35, Last sequence update)
Q1-NUS-2001 (Rel. 40, Last annotation update)
BACULOVIRAL IAP REPEAT-CONTAINING PROTEIN 1 (INHIBITOR OF APOPTOSIS PROTEIN 1) (HIAP1) (HIAP-1) (C-IAP2) (TNFR2-TRAF SIGNALING COMPLEX PROTEIN 1) (IAP HOMOLOG C).
BIRC2 OR AP1 OR IAP1 OR MIHC.
BURDYOLS; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Eukaryota; Metazoa; Chordata; Catarrhini; Hominidae; Homo.
|1]
SEQUENCE FROM N.A.
MEDLINE-96128127; PubMed-8548810;
MEDLINE-96128127; PubMed-8548810;
MROTHE M., Pan M.-G., Henzel W.J., Ayres T.M., Goeddel D.v.,
"The TNFR2-TRAF signaling complex contains two novel proteins
"The TNFR2-TRAF signaling complex contains two novel proteins.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Stehlik C., de Martin R., Binder B.R., Lipp J.;

*Cytokine induced expression of portion inhibitor of apoptosis protein (iap) family member is regulated by NF-kappa B.";

Biochem. Biophys. Res. Commun. 243:827-832(1998).

-!- SIMILARITY: BELONGS TO THE TAP FAMILY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HUMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MEDLINE-98162622; PubMed-9501011;
Stehlik C., de Martin R., Binder B.R.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Mammalia; Eutheria;
NCBI_TaxID=9823;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PROSITE;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; U79142; AAC39171.1; ..
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SIMILARITY: CONTAINS 2 BIR REPEATS.
SIMILARITY: CONTAINS 1 CARD DOMAIN.
SIMILARITY: CONTAINS 1 RING-TYPE ZINC FINGER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PS01282; BIR_REPEAT_1;
PS50143; BIR_REPEAT_2;
PS50209; CARD; 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; Zinc-finger; Repeat.
4 70 BII
90 157 BII
311 345 RII
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              358 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      90
311
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Cetartiodactyla; Suina; Suidae; Sus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              95.2%;
93.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BIR 1.
BIR 2.
RING-TYPE.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 256; DB 1;
Pred. No. 6.5e-26;
2; Mismatches 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              EB2268FA9A6190A4 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
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                                                                                                              related
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                                                                                      BLOOM 93:3418-3431(1999).

C1- FUNCTION: APOPPOTIC SUDPRESSOR. THE BIR MOTIFS REGION INTERACTS
C2- FORM AN HETEROMERIC COMPLEX, WHICH IS THEN RECRUITED TO THE TUMOR
C3- FORM AN HETEROMERIC COMPLEX, WHICH IS THEN RECRUITED TO THE TUMOR
C4- FUNCTIONS FACTOR RECEPTOR 2 (TWAR2).
C5- FUNCECLIULAR LOCATION: CYTOPLASMIC (POTENTIAL).
C6- FOR SECLIULAR LOCATION: THIGHLY EXPRESSED IN FETAL LUNG. AND KIDNEY. IN
C7- FUNCTION OF THE SECRET OF THE ADULT: EXPRESSION IS MAINLY SEEN IN LYMPHOID TISSUES,
C8- FUNCTION OF THE SECOND OF THE ADULT: EXPRESSION IS MAINLY SEEN IN LYMPHOID TISSUES.
C9- FUNCTION OF THE SECOND OF THE SECOND OF THE ADULT:
C9- SIMILARITY: CONTAINS 3 BIR REPEATS.
C9- FUNCTION OF THE SECOND OWNER.
C9- FUNCTION OWNER.
C9- F
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                                                                                                                                                                                                                                                                                                                                                    Pfam; PF00619; CARD; 1.
Pfam; PF00097; zf-C3HC4; 1.
SMART; SM000238; BIR; 3.
SMART; SM00014; CARD; 1.
SMART; SM000184; RING; 1.
                                                                                                              REPEAT
DOMAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; AF070674; AAC83232.1; MIM; 601712; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EMBL; L49432; AAC41943.1; -. EMBL; U45878; AAC50371.1; -. EMBL; U37546; AAC50507.1; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            genes
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ten Cate J.W., Pannekoek H.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Uren A.G., Pakusch M., Hawkins C.J., "Cloning and expression of apoptosis function to inhibit apoptosis and/or receptor associated factors.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TISSUE=Fetal liver;
MEDLINE=96209843; PubMed=8643514;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Farahani R., McLean M., Ikefebvre C., Baird S., Cherton-Horvat G., Farahani R., McLean M., Ikeda J., Mackenzie A., Korneluk R.G.; "Suppression of appotosis in mammalian cells by NAIP and a related family of IAP genes.":
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Cell 83:1243-1252(1995).
                                                                                                                                                                                                                                                           PROSITE; PS01282; BIR_REPEAT_1; PROSITE; PS50143; BIR_REPEAT_2; PROSITE; PS50209; CARD; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             tactor-alpha in vitro are expressed in atherosclerotic lesions, including inhibitor of apoptosis protein-1, stannin, and two no
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               "Vascular endothelial genes that are responsive factor alpha in vitro are expressed in atherosol
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=99252096; PubMed=10233894;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  InterPro;
                                                                                                                                                                                                                                   Apoptosis;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PF00653;
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379:349-353(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IPR001370; BIR.
IPR001315; CARD.
IPR001841; Znf_ring.
                                                                               ; Zinc-finger;
29 96
169 235
255 322
447 525
557 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BIR;
                                                                                                                                                                                                                                      Repeat
                                                                                                              BIR 1.
BIR 2.
BIR 3.
CARD.
                                                                                      RING-TYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            van Zonneveld A.J.,
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inhibitory protein hou
bind tumor necrosis f
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     to tumor necrosis
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Best Local s
Matches 42
                                                                                                                                                                                                                                                                                  1 and 2 genes.;
Genomics 46:495:503(1997).
Genomics 46:495:503(1997).
If FUNCTION: APOPPOTIC SUPPRESSOR. THE BIR MOTIES REGION INTERACTS WITH THE RECEPTOR ASSOCIATED FACTORS 1 AND 2 (TRAF1 AND TRAF2) TO FORM AN HETEROWERIC COMPLEX, WHICH 15 THEM RECRUITED TO THE TUNC NECROSIS FACTOR RECEPTOR 2 (TREF2) (BY SIMILARITY).
I-SUBCELLULAR LOCATION: CYTOPLASMIC (POTENTIAL).
I-SUMILARITY: BELONGS TO THE IAP FAMILY.
I-SIMILARITY: CONTAINS 3 BIR REPENTS.
I-SIMILARITY: CONTAINS 1 RING-TYPE ZINC FINGER.
                                                                                                                                                                                                                                                                                                                                                                                                                 SEQUENCE FROM MUSCLE;
TISSUE-Skeletal muscle;
MEDIINE-98110590; PubMed-9441758;
MEDIINE-98110590; PubMed-9441758;
Liston P., Lefebvre C., Fong W.G., Xuan J.Y., Korneluk R.G.;
Liston P., Lefebvre C., Fong W.G., Xuan J.Y., Korneluk R.G.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  008863:
01-NOV-1997 (Rel. 35, Created)
01-NOV-1997 (Rel. 35, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
BACULOVIRAL IAP REPEAT-CONTAINING PROTEIN 2 (INHIBITOR PROTEIN 1) (MIAP1).
                                                                Pfam; PF00653; BIR; 3.
Pfam; PF00619; CARD; 1.
Pfam; PF00097; zf-C3HC4; 1.
                                                                                                                                                                                       use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entitles requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     BIRC2 OR API1 OR IAP1.
Mus musculus (Mouse).
Eukaryota, Metazoa; Chordata;
Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CONFLICT
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                                                                                                         InterPro;
                                                                                                                                                 MGD; MGI:1197007; B1rc2.
                                                                                                                       InterPro;
                                                                                                                                      InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BIR2_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NCBI_TaxID-10090
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       189 LAKAGFYYIGPGDRVACFACGGKLSNWEPKDNAMSEHLRHFPKCPF 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 LARAGETYIGPGDRVACFACGGKLSNWEPKDDAMSEHRRHFPNCPF 46
                         SM00238; BIR; 3.
SM00114; CARD; 1.
SM00184; RING; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 Similarity
42; Conser
PS01282; BIR_REPEAT_1; PS50143; BIR_REPEAT_2;
                                                                                                          IPR001841;
                                                                                                                       IPR001315;
                                                                                                                       IPR001370; BIR.
IPR001315; CARD.
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2; Mismatches
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N -> H (IN REF. 2).
D -> E (IN REF. 2).
A -> P (IN REF. 2).
K -> R (IN REF. 2).
K -> R (IN REF. 2).
C -> P (IN REF. 2).
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No. 1
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RESULT 6
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Best Local
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01-0CT-1996 (Rel. 34, Created)
01-0CT-1996 (Rel. 34, Last sequence update)
00-0CT-1996 (Rel. 34, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
20-AUG-2001 (Rel. 40, Last annotation update)
BACULOVIRAL LAP REPEAT-COMPAINING PROTEIN 4 (INHIBITOR OF APOPTOSIS PROTEIN) (X-LINKED IAP)
(IAP-LIKE PROTEIN) (HILP).
(IAP-LIKE PROTEIN) (HILP).
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DOMAIN
ZN_FING
SEQUENCE
                                                                                                                                                                                                                                                                Duckett C.S., Nava V.E., Gedrich R.W., Clem R.J., v Giffillan M.C., Shiels H., Harcwick J.W., Thompson "A conserved family of cellular genes related to the gene and encoding apoptosis inhibitors."; EMBO J. 15:2685-2694(1996).
  This SWISS-PROT entry is copyright. It is produced through a collaboration -
                                                                                                                                       Deveraux Q.L., Takahashi R., Salvesen G.S., Reed J.C., "X-linked IAP is a direct inhibitor of cell-death prot Nature 388.300-304(1997).
                                                                                                                                                                                                                                                                                                                                                                   TISSUE-Fetal brain;
MEDLINE-96149249; PubMed-8552191;
MIDIATE-96149249, Tammai K., Lefebbre C., Baird
Fire P., Roy N., Tammai K., Lefebbre C., Baird
Farahani R., McLean M., Ikeda J., Mackenzie A.,
"Suppression of apoptosis in mammalian cells by
family of TAP genes.";
Nature 379:349-353(1996).
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                                                                                                                             +
                                                                                                                                                                                                                   Gratham D
Submitted
                                                                                                                                                                                                                                                                                                                                TISSUE=Fetal heart;
MEDLINE=96256286; PubMed=8654366;
                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQUENCE FROM N.A
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                                                                                                                                                                             MEDLINE-97373959; PubMed-9230442;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Homo sapiens (Human)
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REPEAT
                                                                                       -1- TISSUE SPECIFICITY: UBIQUITOUS,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                187 LAKAGFYYIGPGDRVACFACDGKLSNWERKDDAMSEHQRHFPSCPF 232
                                    LEUKOCYTES.
SIMILARITY:
SIMILARITY:
SIMILARITY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 LARAGEYYIGPGDRVACFACGGKLSNWEPKDDAMSEHRRHFPNCPF
                                                                                                              FUNCTION: APOPTOTIC SUPPRESSOR. INHIBITOR OF CASPASE-3 AND CASPASE-7.
                                                                                                    SUBCELLULAR LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity 89.1
41; Conservative
                                                                                                                                                                                                                                           FROM N.A.
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; Zinc-finger;
27 94
167 23
253 320
444 512
553 587
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 Swiss
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                                 BELONGS TO THE IAP FAMILY CONTAINS 3 BIR REPEATS. CONTAINS 1 RING-TYPE ZINC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STANDARD
 Institute of
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Repeat.
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                                                                                                     CYTOPLASMIC
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Pred. No. 9.6e
3; Mismatches
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BIR 2.
BIR 3.
CARD.
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Catarrhini; Hominidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRT;
 Bioinformatics
                                                                                       EXCEPT
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                                                                                                                                                                                                                                                                                                                 Clem R.J., van Dongen J.L.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 1;
.6e-24;
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                                     FINGER
                                                                                       PERIPHERAL
                                                                                                                                                                                                                                                                                                                                                                                                         S., Cherton-Horvat G., Korneluk R.G.;
NAIP and a related
and
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                                                                                                                                                                                                                                                                                           on C.
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the
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EMBL outstation
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OC AICHO
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OC AICHO
OC AICHO
OC WCBL.
RN 1110
RN 111
                                                                          RC TISSUE-Spiden;

RX MEDLINE-97101112; PubMed-8945639;

RA Digby M.R., Kimpton W.G., York J.J., Connick T.E., Lowenthal J.W.;

RA Digby M.R., Kimpton W.G., York J.J., Connick T.E., Lowenthal J.W.;

RY "ITA, a vertebrate homologue of IAP that is expressed in T

RY Tymphocytes.";

RI DAN Cell Biol. 15.981-988(1995).

CC -: FUNCTION: APOPTOTIC SUPPRESSOR (BY SIMILARITY).

CC -: SUBCELLULAR LOCATION: PREDOMINANTLY NUCLEAR.

CC -: SUBCELLULAL AND MEDDULARY CELLS OF THE THYMUS.

CC -: SUBCELLULAL AND MEDDULARY CELLS ARE INDUCED WITHIN 4-8 HOURS OF

CC -: SIMILARITY: CONTAINS 3 BIR REPEATS.

CC -: SIMILARITY: CONTAINS 1 RING-TYPE ZINC FINGER.

CC -: SIMILARITY: CONTAINS 1 RING-TYPE ZINC FINGER.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local 9
Matches 34
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01-NOV-1997
01-NOV-1997
20-AUG-2001
INHIBITOR OF
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CONFLICT
CONFLICT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PROSITE; PS01282; BIR_REPEAT_1; 3.
PROSITE; PS50143; BIR_REPEAT_2; 3.
Apoptosis; Zinc-finger; Repeat; Thiol protease inhibitor.
REPEAT 26 93 BIR 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gallus gallus (Chicken)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  BIR_CHICK
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
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   This SWISS-PROT entry is copyright. It is produced through between the Swiss Institute of Bioinformatics and the E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NCBI_TaxID-9031;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             184 LASAGLYYTGIGDQVQCFCCGGKLKNWEPCDRAWSEHRRHFPNCFF 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 LARAGEYYIGPGDRVACFACGGKLSNWEPKDDAMSEHRRHFPNCPF 46
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SM00184; RING; 1
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163
265
450
450
162
423
497
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(Rel. 35, Last sequence update)
(Rel. 40, Last annotation update)
F APOPTOSIS PROTEIN (IAP) (INHIBITOR
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Neognathae; Galliformes; Phaslanidae; Phaslaninae.
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Pred. No. 1.8e-17;
1; Mismatches 11
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S -> C (IN REF. 1).
Q -> P (IN REF. 2).
W; 9D394C16D45EB635 (
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      EMBL outstation
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          collaboration -
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RESULT 8
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Best Local
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Pfam: PF00659; CARD: 1.
Pfam: PF00097; zf-C3HC2; 1.
SMART: SM00238; BIR: 3.
SMART: SM00114; CARD: 1.
SMART: SM00184; RING: 1.
                                SEQUENCE FROM N.A.

Parahani R., Lefebvre C., Korneluk R.G., Mackenzie A.E.;

Submitted (JUN-1997) to the EMBL/GenBank/DDBJ databases.

1- FUNCTION: APOPTOTIC SUPPRESSOR, INHIBITOR OF CASPASE-3

CASPASE-7 (BY SIMILARITY).

1- SUBCELLULAR LOCATION: CYTOPLASMIC (BY SIMILARITY).

1- SIMILARITY: BELONGS TO THE IAP FAMILY.

1- SIMILARITY: CONTAINS 3 BIR REPEATS.

1- SIMILARITY: CONTAINS 1 RING-TYPE ZINC FINGER.
                                                                                                                                                                                STRAIN-C57BL/6 X CBA: TISSUE-Liver:
MEDLINE-96209943; PubMed-8643514;
Uren A.G., Pakusch M., Hawkins C.J., Puls K.L., Vaux D.L.;
"Cloning and expression of apoptosis inhibitory protein homologs
"Cloning to inhibit apoptosis and/or bind tumor necrosis factor
receptor-associated factors.";
Proc. Natl. Acad. Sci. U.S.A. 93:4974-4978(1996).
                                                                                                                                                                                                                                                                                                                                                                         060989; 008865;
01.NOV-1997 (Rel. 35, Created)
01.NOV-1997 (Rel. 35, Last sequence update)
20.AUG-2001 (Rel. 40, Last annotication update)
BACULOVILAL IAP EPERT-CONTRINKING PROTEIN 4 (INHIBITOR OF APOPTOSIS PROTEIN 3) (X-LINKED INHIBITOR OF APOPTOSIS PROTEIN) (X-LINKED IAP)
(IAP HOMOLOG A) (MARP3) (MIAP-3).
BIRC4 OR API3 OR XIAP OR AIPA OR MIHA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PROSITE; PS01282; BIR_REPEAT_1; PROSITE; PS50143; BIR_REPEAT_2; PROSITE; PS50209; CARD; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             EMBL; U27466; AAB48118.1; -.
                                                                                                                                                                                                                                                                                                                                Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Apoptosis;
REPEAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                InterPro;
This SWISS-PROT entry is copyright. It is produced between the Swiss Institute of Bioinformatics and
                                                                                                                                                                                                                                                                                                                                                              Mus musculus (Mouse).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BIR4_MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SEQUENCE
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                                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                  NCBI_TaxID-10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                196 VAKAGLDDLGTADKVACVNCGVKLSNWEPKDNAMSEHRRHFPNCPF 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 LARAGEYYIGPGDRVACFACGGKLSNWEPKDDAMSEHRRHFPNCPF 46
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33; Conser
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IPR001841; Znf_ring.
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176
262
564
611 AA;
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329
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Rodentia;
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BIR 2.
BIR 3.
RING-TYPE.
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Pred. No. 2
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Sciurognathi; Muridae;
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through a collaboration of the EMBL outstation -
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InterPro; IPR001384; 2nf_ring.
Pfam; PP00653; BIR; 3
Pfam; PF00097; zf-C3HC4; 1.
SMARP; SM00138; BIR; 3
SMART; SM00184; RING; 1.
PROSITE; PS01282; BIR_REPEAT_1; 3
PROSITE; PS01282; BIR_REPEAT_2; 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                          BIR4_RAT STANDARD; PRT; 496 AA.

Q98016;

20-AUG-2001 (Rel. 40, Created)

20-AUG-2001 (Rel. 40, Last sequence update)

20-AUG-2001 (Rel. 40, Last sequence update)

20-AUG-2001 (Rel. 40, Last sequence update)

BACULOVIRAL IAP EEPEAT-CONTAINING PROTEIN 4 (INHIBITOR OF APOPTOSIS PROTEIN 3) (X-LINKED INHIBITOR OF APOPTOSIS PROTEIN 3) (X-LINKED INHIBITOR OF APOPTOSIS PROTEIN 3) (X-LINKED INHIBITOR OF APOPTOSIS PROTEIN) (X-LINKED IAP)

BIRC4 OR APDI3 OR XIAP-3).

BIRC4 OR APDI3 OR XIAP-3).
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ZN_FING
CONFLICT
                                                              This Sw
between
                                                                                                                                                                                                                                                                                                                                                                     Eukaryota: Metazoa;
Mammalia; Eutheria;
NCBI_TaxID=10116;
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or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                   Salto N.;
                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rattus norvegicus (Rat).
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SWISS-PROT entry is copyright. It is produced through a collaboration een the Swiss Institute of Bioinformatics and the EMBL outstation -
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93 BII
163 230 BII
163 230 BII
264 329 BII
449 483 RII
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Rodentia;
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462
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1; Mismatches
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BIR 2.
BIR 3.
BIR 3.
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C (IN C) 
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4 RET 2).
6 RET 2).
7 RET 2).
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RESULT
BIR1_HU
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Best Local
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                                                                                                                                                                                                                                                                                  TISSUE-Fetal brain;
MEDLINE-93112344; PubMed-7813013;
ROY N., Wahadevan M.S., McLean M., Shutler G., Yaraghi Z.,
ROY N., Wahadevan M.S., McLean M., Shutler G., Yaraghi Z.,
Roy N., Wahadevan M.S., McLean M., Shutler G., Yaraghi Z.,
Faranhini R., Baird S., Besner-Johnston A., Lefebyre C., Rang .
Salih M., Abbry H., Tamai K., Guan X., Icannou P., Crawford T.
de Jong P.J., Surh L., Ikeda J., Korneluk R.G., Mackenzie A.;
"The gene for neuronal apoptosis inhibitory protein is partial
deleted in individuals with spinal muscular atrophy.";
cell 80:167-178(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            BIRL_HUMAN STANDARD; PRT; 1403 AA.
Q13075; Q13770; Q039796; O75857;
O1-NOY-1997 (Rel. 35, Created)
20-AUG-2001 (Rel. 40, Last sequence update)
20-AUG-2001 (Rel. 40, Last sequence update)
BACULOVERAL IAP REPEAT-CONTAINING PROTEIN 1 (NEURONAL APOPTOSIS
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REPEAT
ZN_FING
SEQUENCE
der Steege G., Draaijers
Anzevino R., Velona I.,
Buys C.H.C.M.;
Submitted (MAY-1995) to
                                                                                                         MacKenzie A.E.;
"Sequence of a 131-kb region of
atrophy candidate genes SMN and
Genomics 48:121-127(1998).
                                                                                                                                                                           MEDLINE-98163755; PubMed-9503025;
Chen Q., Baird S.D., Mahadevan M.,
Xuan J. Y., Kang X., Lefebvre C.,
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                                                                      SEQUENCE OF
                                                                                                                                                                                                                                     TISSUE-Brain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Metazoa;
Mammalia; Eutheria;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INHIBITORY PROTEIN).
BIRC1 OR NAIP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF00653; BIR; 3.
Pfam; PF00097; zf-C3HC4; 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; AB033366; BAA85304.1; ... InterPro; IPR001370; BIR. InterPro; IPR001841; Znf_ring.
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                                                                                                                                                                                                                                                    SEQUENCE FROM N.A., AND REVISIONS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NCBI_TaxID=9606;
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SMART; SM00184; RING; 1
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184; Rin.
201282; BIR_NL
20143; BIR_REPEA:
2550143; BIR_REPEA:
25, Zinc-finger; Repeat.
26 230 BIR 1.
279 BIR 2.
279 BIR 3.
279 RING-TYPE.
2725023C7
(MAY-1995) to the EMBL/GenBank/DDBJ
                                                 386-623 FROM N.A.
G., Draaljers T.G.,
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Primates;
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Pred. No. 1.
                                  c.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Craniata; Vertebrata; Euteleostomi; Catarrhini; Hominidae; Homo.
                                  Grootscholten P.
C., Scheffer H.,
                                                                                                                          5q13.1
NAIP.";
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                                                                                                                                           containing the spinal muscular
                                                                                                                                                                             J.-E.,
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                                    van Ommen
                                                                                                                                                                               Korneluk R.G.,
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RESULT 11
BIRG_MOUSE
ID BIRG_M
AC Q9JIB3
DT 20-AUG
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                                                                                                                         Query Match
Best Local
                                                                                                                Matches
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                                                                                                                                                                          REPEAT
CONFLICT
CONFLICT
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CONFLICT
                                                                                                                                                                                                                                     Apoptosis;
REPEAT
REPEAT
BIRG_MOUSE STANDARD;
09JIB3;
20-AUG-2001 (Rel. 40, Created)
                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bininformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE-96149249; PubMed-8552191;
Liston P., Roy N., Tamal K., Lefebvre C., Baird
Farahani R., McLean M., Ikeda J., Mackenzie A.,
"Suppression of apoptosis in mammalian cells by
                                                                                                                                                                                                                                                                 SMART; SM00238; BIR; 3
PROSITE; PS01282; BIR_REPEAT_1;
PROSITE; PS50143; BIR_REPEAT_2;
                                                                                                                                                                                                                                                                                                                     EMBL; U19251; AAC52045.1; -.
EMBL; U80017; AAC52047.1; -.
EMBL; U21913; AAA64504.1; -.
EMBL; AC005031; AAC62261.1;
MIM; 600355; -.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE OF 222-1403
Jones K., Graves T.,
Submitted (JUN-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   family of IAP genes.";
Nature 379:349-353(1996)
                                                                                                                                                                                                                                                                                                  Pfam; PF00653; BIR;
                                                                                                                                                                                                                                                                                                           InterPro;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TISSUE-Liver,
                                                                         299
                                                                                   1 LARAGFYYIGPGDRVACFACGGKLSNWEPKDDAMSEHRRHFPNCPF 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SPINAL CORD.

DISEASE: MUTATED OR DELETED FORMS OF NAIP HAVE BEEN FOUND IN INDIVIDUALS WITH SPINAL MUSCULAR ATROPHY TYPE I (SMA TYPE I). SNAS ARE FATAL AUTOSOMAL RECESSIVE DISORDERS SUBCLASSIFIED AS TYPE I (HERDNIG-HOFFMANN DISEASE), TYPE II (INTERNEDIATE FORM), AND TYPE III (WOHLFART-KUGELBEG-WELANDER DISEASE) BASED UPON THE AGE OF ONSET AND CLINICAL SEVERITY. THESE KEURODEGEMERATIVE DISORDERS ARE CHARACTERLED BY DEGEMERATION OF LOWER MOTOR NUBRONS, LEADING TO PROGRESSIVE PARALYSIS MUSCULAR ATROPHY. CONCERNS 1 IN 6000
                                                                                                                                                                                                                                                                                                                                                                                                                                               NEWBORNS.
SIMILARITY: CONTAINS 3 BIR REPEATS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TISSUE SPECIFICITY: EXPRESSED
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NEURONS.
                                                                       LAKAGLEYTGIKDIYQCESCGGCLEKWQEGDDPLDDHTRCFPNCPF
                                                                                                                         Similarity
                                                                                                                                                                                                                                                                                                           IPR001370; BIR.
                                                                                                                                                                 159
278
278
222
386
535
553
1228
                                                                                                               Conservative
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227
345
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1231
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                                                                                                                       54,38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            McPherson J.;
to the EMBL/GenBank/DDBJ databases
                                                                                                                                                                 159613
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                                                                                                                                                             BIR 1.

BIR 2.

BIR 3.

BIR 3.

VP -> ST (IN REF. 4).

VP -> V (IN REF. 3).

Y -> H (IN REF. 3).

Y -> H (IN REF. 3).

MISSING (IN REF. 4).

MW; 566304C154DA5E64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESSED IN MOTOR NEURONS, BUT NOT IN SENS
                                                                                                               6
                                                                                                               Score 149; DF
Pred. No. 1.96
6; Mismatches
                       PRT;
                                                                                                                                                                                                                                                                     ωω
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                       1402
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..9e-11;
les 15;
                       ð
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S., Cherton-Horvat
Korneluk R.G.;
NAIP and a related
                                                                                                                                  Length 1403;
                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A VARIETY OF
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                                                                                                               Gaps
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                                                                                                                                                                                                                   BIRA_MOUSE
                                                                                                                                                                                                                            RESULT
                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 24
                                                                                                                                                                                                                                                                                                                                                     SEQUENCE
   MEDLINE-99431676;
                                                                                                                                                                                                         BIRA_MOUSE
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the EMPL property of the EMPL outstation outstatio
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   09QWK5; 09R017; 09JIB5;
20-AUG-2001 (Rel. 40, Created)
20-AUG-2001 (Rel. 40, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
20-AUG-2001 (Rel. 40, Last annotation update)
BACULOVIEAL IAP REPEAT-CONTAINING PROTEIN IA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EMBL; AF242433; AAF82749.1) -. MGD; MGI:1858556; Birclg. Interpro; IDF001370; BIR. Pfam; PF00653; BIR; 3. SMART; SM00238; BIR; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Genome Res. 10:1095-1102(2000).
-!- FUNCTION: PREVENTS MOTOR-NEURON APOPTOSIS INDUCED BY A VARIETY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE FROM N.A. MEDILINE-20414747; PubMed-10958627; MEDILINE-20414747; PubMed-10958627; Endrizzi M.G., Hadinoto V., Growney J.D., Mil "Genomic sequence analysis of the mouse Naip Genome Res. 10:1095-1102(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BIRCIA OR NAIP1 OR NAIP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PROSITE; PS01282; BIR_REPBAT_1; 2.
PROSITE; PS50143; BIR_REPBAT_2; 3.
Apoptosis; Repeat, Multigene family,
REPBAT 159 27 BIR 1.
REPBAT 159 345 BIR 3.
REPBAT 278 345 BIR 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NCBI_TaxID=10090
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Eukaryota, Metazoa;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mus musculus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  20-AUG-2001 (Rel. 40, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
BACULOVIRAL IAP REPEAT-CONTAINING PROTEIN IG
INHIBITORY PROTEIN 7).
                                    SEQUENCE FROM N. A
                                                                                                              Yaraghi Z., Korneluk R.G., MacKenzie A.E.;
"Cloning and characterization of the multiple copies of t
homologue of NAIP (neuronal apoptosis inhibitory protein)
Submitted (JUN-1997) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Mammalia; Eutheria; Rodentia;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mus musculus (Mouse)
                                                                                                                                                                                                                                                                         SEQUENCE FROM N.A
                                                                                                                                                                                                                                                                                                                                                   NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181 LSAAGFVFTGKRDTVQCFSCGGSLGNWEEGDDPWKEHAKWFPKCEF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 LARAGEYYIGPGDRVACFACGGKLSNWEPKDDAMSEHRRHEPNCPF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STANDARD;
PubMed-10501978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Chordata;
Rodentia;
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Pred. No. 2e~10;
4; Mismatches
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Sciurognathi; Muridae
                                                                                                                                                                                                                                                                                                                                                                                            Craniata; Vertebrata; Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          C1DFFBA359893E0D CRC64;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (NEURONAL APOPTOSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         18;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 1402;
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RESULT 13
BIRE_MOUSE
ID BIRE_F
AC QSPOIG
DT 20-AUG
DT 20-AUG
DT 20-AUG
DT 10-AUG
DT 20-AUG
DT 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches
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EMBL; AF135491; AAD56763.1; -.
EMBL; AF242432; AAR92752.1; -.
MGD; MGI:1298223; Bircia,
InterPro; IPR001370; BIR,
Pfam; PF00653; BIR; 3.
SMART; SM00238; BIR; 3.
                                                                                                                                                                                                                          BIRE_MOUSE STANDARD: PRT; 1403 AA. 09R015; 09R029; PB1703; 009122; 009121; 20-AUG-2001 (Rel. 40, Created)
20-AUG-2001 (Rel. 40, Last sequence update)
20-AUG-2001 (Rel. 40, Last annotation update)
BACULOVIRAL IAP REPEAT-CONTAINING PROTEIN 1E
INHIBITORY PROTEIN 5).
BIRCLE OR NAIPS OR NAIP-RS3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              REPEAT
CONFLICT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Apoptosis;
REPEAT
REPEAT
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                                                                                               Mus musculus (Mouse).
Eukaryota; Metazoa; Chordata;
Mammalla; Eutherla; Rodentla;
MCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           This SMISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its produced by non-profit institutions as long as its content is in no way the content in the content in the content is in the content in the content is in the content in the content in the content is in the content in the content in the content is in the content in the c
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Endrizzi M.G., Hadinoto V., Growney J.D., Miller W., Dietrich "Genomic sequence analysis of the mouse Naip gene array."; Genome Res. 10:1095-1102(2000).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Huang S., Scharf J.M., Growney J
"The mouse Naip gene Cluster on
functional transcripts.",
Manum. Genome 10:1032-1035(1999).
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       SEQUENCE FROM N.A.
MEDLINE-99431676; PubMed-10501978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181 LSAAGFVFTGKRDTVQCFSCGGSLGNWEEGDDPWKEHAKWFPKCEF 226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 LARAGFYYIGPGDRVACFACGGKLSNWEPKDDAMSEHRRHFPNCFF 46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FUNCTION: PREVENTS MOTOR-NEURON APOPTOSIS INDUCED BY SIGNALS.
SIMILARITY: CONTAINS 3 BIR REPEATS.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
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BIR 1.
BIR 2.
BIR 3.
I --> V
L --> N
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D --> N
D --> V
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Pred. No. 2.
                                                                                                                                  Cranlata; Vertebrata; Euteleostomi; Sciurognathi; Muridae; Murinae; Mus
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B31630259595EE67
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for commercial
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REPEAT
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                                                                                                                                                                                                                                      Local
                                                                     LSAAGEVETGKRUTVQCFSCGGSLGNWEEGDDPWKEHAKWFPKCEF 220
                                                                                                                                      LARAGEYYIGPGDRVACFACGGKLSNWEPKDDAMSEHRRHFPNCPF 46
                                                                                                                                                                                                   Similarity 52.
24; Conservative
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Indels

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EMBL, AF135492; AAD56760.1; ...
EMBL, AF131205; AAD56760.1; ...
EMBL, U66326; AAC52974.1; ...
MKD, MGI112989220; Bircle.
InterPro, IPR001370, BIR.
Pfam; PF00653; BIR; 3.
Pfam; PF00653; BIR; 3.
PMANT; SM00238; BIR; 3.
PROSITE; PS01282; BIR, REPEAT_1; 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRAIN-129/SVJ;
STRAIN-129/SVJ;
MEDLINE-97131520; PubMed-8975718;
MEDLINE-97131520; PubMed-8975718;
MEDLINE-97131520; PubMed-8975718;
MEDLINE-97131520; PubMed-8975718;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scharf J.M., Damron D., Frisella A., Bruno S., Beggs A.H., Kunkel L.M., Dietrich W.F.; "The mouse region syntenic for human spinal muscular atrophy liwithin the Lgnl critical interval and contains multiple copies
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SIGNALS:
-I- SIMILARITY: CONTAINS 3 BIR REPEATS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Genomics 38:405-417(1996)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MEDLINE-99417674; PubMed-10486205; Endrizzi M., Huang S., Scharf J.M., Kelter A.R., Wirth Kunkel L.M., Miller W., Dietrich W.F.;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "The mouse Naip gene Cluster on functional transcripts.", Manm. Genome 10:1032-1035(1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE OF 82-168 FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             "Comparative sequence analysis interval.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -!- FUNCTION: PREVENTS MOTOR-NEURON APOPTOSIS INDUCED BY A VARIETY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scharf J.M., Growney J.D., Endrizzi M.G., Dietrich W.F.,
Scharf J.M., Growney J.D., Endrizzi M.G., Dietrich W.F.,
Naip gene cluster on Chromosome 13 encodes several distinct
l transcripts.";
                                                                                                  144
242
242
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                 52.4%;
                                                                                    159695
Score 141; DB Pred. No. 2.1e 4; Mismatches
                                                                                  ₹ o
                                                                                                               of the mouse and human Lgn1/SMA
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                                                                                    B27F645043BCEC42
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           IAP2_DROME S'
Q24307; Q24177; Q24307; Q24177; Q24307; Q24177; 
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09JIB6; PB1704; 009122; 009121;
20-AUG-2001 (Rel. 40, Created)
20-AUG-2001 (Rel. 40, Last sequence up
20-AUG-2001 (Rel. 40, Last annotation
BACCLOVIRAL IAP REPEAT-CONTAINING PROP
                                                                                                                                                                      DROME
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MEDLINE=97131520; PubMed=8975718; Scharf J.M., Damron D., Frisella A., Kunkel L.M., Dietrich W.F.;
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MEDLINE-20414747; PubMed-10958627;
MEDLINE-20414747; PubMed-10958627;
MEDLINE-20414747; PubMed-10958627;
MEDLINE-20414747; PubMed-10958627;
MEDLINE-20414747; PubMed-10958627;
MEDLINE-20414747; PubMed-10958627;
MEDLINE-20414747; MILLER W., Dietrich W.F.;
Genome Res. 10:1095-1102(2000).
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Bukaryota; Metazoa; Chordata;
Mammalla; Eutheria; Rodentia;
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOUSE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pfam; PF00653; BIR; 3.
SMART; SM00238; BIR; 3.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EMBL; AF242431; AAF82751.1; ...
EMBL; U66327; AAC52975.1; ...
MGD: MG:11298222; Birclf.
InterPro; IPR001370; BIR.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  entities requires a license agreement (See http://www.isb-sib.ch/announce/
or send an email to license@isb-sib.ch).
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-I- FUNCTION: PREVENTS MOTOR-NEURON APOPTOSIS INDUCED BY A VARIETY
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BIRCIF OR NAIP6 OR NAIP-RS4.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PROSITE; PS01282; BIR_REPEAT_1; 2.
PROSITE; PS50143; BIR_REPEAT_2; 3.
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                                                                                                                                                                                                                                                                                                       181 LSAAGFVFTGKRDTVQCFSCGGSLGNWEEGDDPWKEHAKWFPKCEF
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60 127 BIR 1.
159 227 BIR 2.
278 345 BIR 3.
               (Rel.
(Rel.
(Rel.
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       024115; 024149; 09V761;
1. 35, Created)
1. 35, Last sequence update)
1. 40, Last annotation update)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           159823 MW;
                                                                                                                                                                                                                                                                                                                                                                                                                    Score 141; DB 1;
Pred. No. 2.1e-10;
4; Mismatches 18
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RA Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
RA Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
RA Adams M.D., Celniker S.E., Holt R.A., Evans C.A., Gocayne J.D.,
RA Adams M.D., Celniker S.E., Holt R.A., Calle R.F.,
RA Adams M.D., Celniker S.E., Holt R.A., Calle R.A.,
RA George R.A., Lewis S.E., Richards S., Ashburner M., Henderson S.N.,
RA Sutton G.G., Wortman J.R., Yandell M.D., Zhang Q., Chen L.X.,
RA Barndon R.C., Rogers Y.-H.C., Blazej R.G., Champe M., Pfeiffer B.D.,
RA Man K.H., Doyle C., Baxer E.G., Helt G., Nelson C.R., Miklos G.L.G.,
RA Man K.H., Doyle C., Baxer E.G., Helt G., Nelson C.R., Miklos G.L.G.,
RA Abril J.F., Agbayani A., An H.-J., Andrews Pfannkoch C., Baldwin D.,
RA Ballew R.M., Basu A., Baxendale J., Bayraktarroglu L., Beasley E.M.,
RA Beeson K.Y., Benos P.V., Berman B.P., Bhandari D., Bolshakov S.,
RA Burtis K.C., Busam D.A., Butler H., Cadleu E., Center A., Chandra I.,
RA Gerry J.M., Cawley S., Dahlke C., Davenport L.B., Davies P.,
RA de Pablos B., Delcher A., Deng Z., Mays A.D., Dew I., Dietz S.M.,
Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Dodson K., Doup L.E., Downes M., Dugan-Rocha S., Dunkov B.C., Dunn P.,
RA Harris N.L., Harvey D., Helman T.J., Hernandez J.R., Houck J.,
RA Harris N.L., Harvey D., Helman T.J., Hernandez J.R., Houck J.,
RA Harris N.L., Harvey D., Helman T.J., Hernandez J.R., Houck J.,
RA Harris N.L., Howland T.J., Wel M.-H., Ibeywam C.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Kimmel B.E., Kodira C.D., Kraft C., Kravitz S., Kulp D., Lai Z.,
RA Merkilov G., Milshina N.V., Mobarry C., Morris J., Moshreif A.,
RA Melson D.R., Nelson K.A., Nixon K., Musskern D.R., Pacleb J.M.,
RA Ralazzolo M., Pittman G.S., Pan S., Pollard D., Puri V., Reese M.G.,
RA Ralazzolo M., Pittman G.S., Pan S., Pollard D.R., Smith T.,
RA Spier E., Spradling A.C., Stapleton M., Strong R., Sun E.,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEDIINE-96256286; PubMed-8654366; Duckett C.S., Nava V.E., Gedrich R.W., Clem R.J., van Dongen J.L., Giffilan M.C., Shiels H., Hardwick J.M., Thompson C.B.; "A conserved family of cellular genes related to the baculovirus iap gene and encoding apoptosis inhibitors."; EMBO J. 15:2685-2694(1996).
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MEDLINE-96128128; PubMed-8548811;
MEDLINE-96128128; PubMed-8548811;
Hay B.A., Massarman D.A., Rubin G.M.;
"Drosophila homologs of baculovirus inhibitor of apoptosis proteins function to block cell death.";
Cell 83:1253-1262(1995).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Drosophila melanogaster (Fruit fly).
Eukaryota; Metazoa; Arthropoda; Tracheata; Hexapoda; Insecta;
Pteryota; Neoptera; Endopterygota; Diptera; Brachycera; Muscomorpha;
Ephydroidea; Drosophilidae; Drosophila.
NCBI_TaxID=7327;
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IAP2 OR ILP OR DIHA OR CG8293.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE FROM N.A. STRAIN-CANTON-S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SEQUENCE FROM N.A. STRAIN-CANTON-S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=BERKELEY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SEQUENCE FROM N.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Thesis (1991), Vanderbilt University / Nashville, U.S.A. [5]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE FROM N.A.
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Query Match
Best Local
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EMBL: (145881; ANC44988.1;
EMBL: (145881; ANC44988.1;
EMBL: (132373; ANC47115.1;
EMBL: (132373; ANC47115.1;
EMBL: (1303808; ANF58095.1;
EMBL: (130809; ANF58095.1;
EMBL: (130809; ANB08398.1;
EMBL: (130809; ANB08398.1;
EMBL: (130809; ANB08398.1;
EMBL: (14581);
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Uren A.G., Pakusch M., Hawkins C.J., Puls K.L., Vaux D.L.;
"Cloning and expression of apoptosis inhibitory protein homologs that
function to inhibit apoptosis and/or bind tumor necrosis factor
receptor-associated factors.";
Proc. Natl. Acad. Sci. U.S.A. 93:4974-4978(1996).
1- EUNCTION: APOPTOTIC SUPPRESSOR. OVEREXPRESSION SUPPRESSES RR AND
HID-DEPENDENT CELL DEATH IN THE EYE.
1- DEVELOPMENTAL STAGE: EXPRESSED AT HIGH LEVELS THROUGHOUT
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-1. SIMILARITY: CONTAINS 3 BIR REPEATS.
-1. SIMILARITY: CONTAINS 1 RING-TYPE ZINC FINGER
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                133
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6; Mismatches 16
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